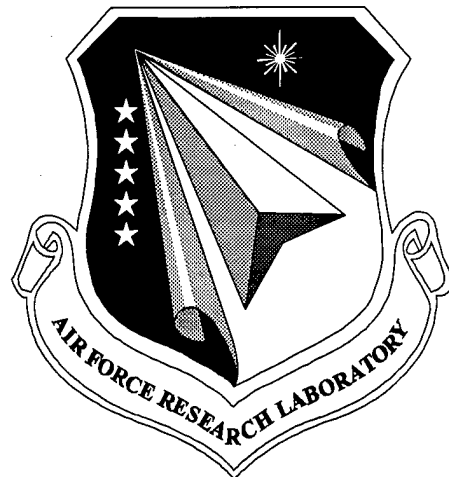
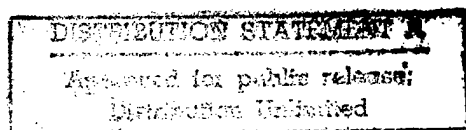
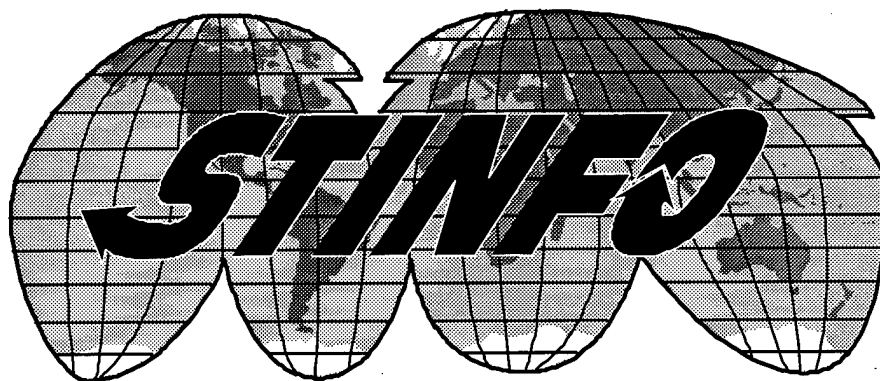


AFRL-WS-WP-TR-1998-9003

AIR FORCE RESEARCH
LABORATORY – WRIGHT
RESEARCH SITE



GUIDE TO TECHNICAL PUBLISHING



AUGUST 1998

(supersedes all previous editions of this guide)

19981029 009



Air Force Research Laboratory
Technical Information Division-STINFO

WRIGHT-PATTERSON AFB, OH

<http://www.wrs.afrl.af.mil/infores/library/stinfo.htm>

DTIC QUALITY INSPECTED 4

AQ498-01-0016



ABSTRACT

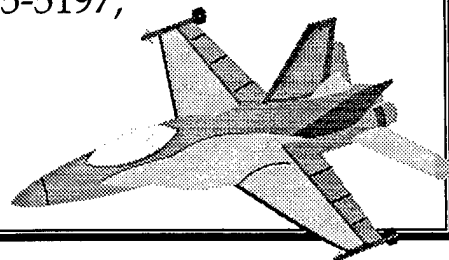
The following "HOW TO" guide has been prepared by the Air Force Research Laboratory STINFO office/ Aeronautical Systems Center to simplify the scientific and technical publication process.

An effort is not complete until it is documented and the results distributed to the appropriate activities. This guide offers step-by-step instructions and samples, detailing the processes involved in the preparation, organization, and distribution of technical publications prepared by AFRL/ASC in-house scientists and engineers as well as DoD contractors.

Written examples of all required forms and/or letters are included in the guide. **Blank paper copies of the forms discussed in this guide have been included for your use. A diskette with these forms is also available, upon request, from the STINFO office.**

In demand throughout DoD and the world's scientific and business communities, AFRL/ASC technical publications are representative of the quality of the work being performed at Wright-Patterson AFB. The primary goal of this guide is to ensure that the quality of these publications matches the high quality of the information they chronicle.

More detailed information on STINFO and technical publications can be obtained through the STINFO web site, <http://www.wrs.afrl.af.mil/infores/library/stinfo.htm> or by calling one of our STINFO editors at DSN 785-5197, (937) 255-5197.



REPORT DOCUMENTATION PAGE			Form Approved OMB No. 0704-0188	
Public reporting burden for this collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503.				
1. AGENCY USE ONLY (Leave blank)		2. REPORT DATE AUGUST 1998		3. REPORT TYPE AND DATES COVERED FINAL 08/01/98 - 0/-31-98
4. TITLE AND SUBTITLE AIR FORCE RESEARCH LABORATORY - WRIGHT RESEARCH SITE GUIDE TO TECHNICAL PUBLISHING			5. FUNDING NUMBERS	
6. AUTHOR(S) J. BURKE, L. J. DORN, W. J. HALL, AND S. SCHAFER				
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) Det 1 AFRL/WST Technical Information Division Air Force Research Laboratory Air Force Materiel Command Wright-Patterson AFB OH 45433-7411			8. PERFORMING ORGANIZATION REPORT NUMBER	
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES) Det 1 AFRL/WST, Technical Information Division Air Force Research Laboratory Air Force Materiel Command Wright-Patterson AFB OH 45433-7411 POC: Joe Burke, 937-255-5197			10. SPONSORING/MONITORING AGENCY REPORT NUMBER AFRL-WS-WP-TR-1998-9003	
11. SUPPLEMENTARY NOTES Supersedes Wright Laboratory Guide to Technical Publishing, WL-TR-97-6001, ADA322944				
12a. DISTRIBUTION AVAILABILITY STATEMENT APPROVED FOR PUBLIC RELEASE; DISTRIBUTION IS UNLIMITED			12b. DISTRIBUTION CODE	
13. ABSTRACT (Maximum 200 words) A GUIDE DESIGNED BY THE AIR FORCE RESEARCH LABORATORY (AFRL) WRIGHT RESEARCH SITE (WRS) SCIENTIFIC AND TECHNICAL INFORMATION (STINFO) OFFICE STAFF FOR PREPARERS OF AFRL WRS TECHNICAL REPORTS AND MEMORANDA. THE GUIDE CONTAINS PROCESS CHECKLISTS, HIGHLIGHTS BASIC DOD, ANSI-NISO AND AF REQUIREMENTS, AND PROVIDES SAMPLE NOTICE PAGES AND REPORT COVERS. GENERAL GUIDANCE, DETAILED INSTRUCTIONS AND PERTINENT INFORMATION FOR DISSEMINATING AND PRINTING TECHNICAL DOCUMENTS ARE ALSO ADDRESSED.				
14. SUBJECT TERMS TECHNICAL REPORTS--EDITING EDITING GUIDES			15. NUMBER OF PAGES 60	
			16. PRICE CODE	
17. SECURITY CLASSIFICATION OF REPORT UNCLASSIFIED	18. SECURITY CLASSIFICATION OF THIS PAGE UNCLASSIFIED	19. SECURITY CLASSIFICATION OF ABSTRACT UNCLASSIFIED	20. LIMITATION OF ABSTRACT SAR	

INDEX

SECTION 1	Publishing a Technical Report, An Organizational Checklist.....	1
	SAMPLES:	
	Data Item Description (DID)	3
	Contract Data Requirements List (CDRL)	4
	Receiving Report, DD 250	5
	Time Line For Processing	6
SECTION 2	Types of Reports	7
SECTION 3	SAMPLES:.....	9
	Request for Editing and Publishing Support, WL Form 79	9
	Report Documentation Page, SF 298.....	10
	Small Business Innovation Research (SBIR) Report Documentation Page	11
	Public Affairs Release Letter.....	12
	Mandatory Addresses	14
	Mailing Labels.....	15
	Document Receipt & Destruction Certificate, AF Form 310 [For SECRET Reports]	16
SECTION 4	Required & Optional Elements to Include in TRs and TMs in Sequence Order.....	17
	Format of AFRL/ASC Publications.....	19
SECTION 5	Samples of Technical Report/Memo Covers:	29
	Unclassified/Unlimited (In-House).....	29
	Unclassified/Unlimited (Contractor).....	30
	Unclassified/Limited (ASC Contractor).....	31
	Unclassified/Limited (SBIR).....	32
	Classified/Limited.....	33
	Technical Memo	34

SECTION 6	Disseminating Scientific and Technical Information, AFI 61-204	35
	Export Control Statement	
	Distribution Statements -- Chart on Reasons/What to Use.....	37
SECTION 7	SAMPLES of NOTICE PAGES	
	Unlimited/Unclassified.....	38
	Small Business Innovation Research (SBIR):	
	2 Year Rights (Contracts issued 1992 and earlier	39
	4 Year Rights (Contracts issued between 1993 and 1995)	40
	5 Year Rights (Contracts issued in 1996 and after)	41
	Limited With Proprietary Information (Not SBIR)	42
	Limited Without Proprietary Information	43
SECTION 8	Printing and Camera Ready Copy	44
	SAMPLES:	
	Editor Transmittal Ltr -- Unclassified	47
	Editor Transmittal Ltr -- Classified.....	48
SECTION 9	Journal Articles	49
	Sample Article	50
SECTION 10	DTIC Accession Notice, DTIC Form 50	51
	Electronic Submission of TR/TM's to DTIC.....	52
SECTION 11	Publications with Related Policies and Instructions, AFD 61-2, Atch 3 [Publishing & STINFO Official Guidance Sources]	53



SECTION 1 CHECKLIST

DRAFT REPORT REQUIRING EDITING

- ☐ SUBMIT DRAFT FOR EDITING TO DET 1 AFRL/WST USING
- ☐ WL FORM 79, REQUEST FOR EDITING AND PUBLISHING SUPPORT
- ☐ FOLLOW THE STANDARD: ANSI/NISO Z39.18-1995
- ☐ SINGLE SIDED, DOUBLE SPACED
- ☐ SUBMIT:
 - ☐ DRAFT COVER
 - ☐ SF 298, REPORT DOCUMENTATION PAGE

EDITED DRAFT WILL BE RETURNED TO ORGANIZATION WITHIN 80
DAYS WITH TRANSMITTAL LETTER AND NOTICE PAGE

- ☐ PRODUCE "CAMERA READY" MANUSCRIPT
 - ☐ COVER
 - ☐ EDIT CHANGES MADE
 - ☐ SINGLE SPACED
 - ☐ NOTICE PAGE WITH SIGNATURES
 - ☐ IF PUBLIC RELEASE, STATEMENT A, (OTHER THAN 6.1 FUNDED) MUST HAVE PR CASE NUMBER AND DATE APPROVED
 - ☐ BEST QUALITY, ORIGINAL GRAPHICS/HALF-TONES
 - ☐ DISTRIBUTION LIST INCLUDED, IF CLASSIFIED
- ☐ SUBMIT TO DET 1 AFRL/WST FOR PRINTING (IF NEEDED) AND/OR DISTRIBUTION
 - ☐ INDICATE NUMBER OF PRINTED COPIES DESIRED
 - ☐ PROVIDE MAILING LABELS FOR DISTRIBUTION (INCLUDE AD 310s IF SECRET)
 - ☐ ORIGINAL MANUSCRIPT RETURNED TO MONITOR FROM PRINTERS
 - ☐ PRINTED COPIES SENT TO MAILING LABEL LOCATIONS
 - ☐ EXTRA COPIES FORWARDED TO MONITOR
 - ☐ IF COLOR REQUIRED, SPECIFY PAGE NUMBER(S)
- ☐ ANNOTATE CASE FILE DATA WHEN DTIC FORM 50 IS RECEIVED WITH ASSIGNED "AD" NUMBER

STINFO/Technical Editing Section

Tel. # 937-255-5197, DSN 785-5197

FAX # 937-255-5383, DSN 785-5383



CHECKLIST

CAMERA READY, SBIR OR OTHER TYPE OF REPORT NOT REQUIRING EDITING

(HAS NOT YET BEEN PROCESSED THROUGH STINFO)

- ☐ SUBMIT TO DET 1 AFRL/WST USING WL FORM 79, REQUEST FOR EDITING AND PUBLISHING SUPPORT
- ☐ SUBMIT TWO COPIES IF PRINTING NOT REQUIRED
- ☐ FOLLOW THE STANDARD: ANSI/NISO Z39.18-1995
- ☐ SINGLE SIDED, SINGLE SPACED
- ☐ "CAMERA READY" MANUSCRIPT WITH:
 - ☐ COVER
 - ☐ SF 298, REPORT DOCUMENTATION PAGE
 - ☐ NOTICE PAGE APPROPRIATE FOR TYPE OF REPORT WITH SIGNATURES
 - ☐ IF PUBLIC RELEASE, STATEMENT A, (OTHER THAN 6.1 FUNDED) MUST HAVE PR CASE NUMBER AND DATE APPROVED
 - ☐ ORIGINAL GRAPHICS/ HALF-TONES
 - ☐ DISTRIBUTION LIST INCLUDED, IF CLASSIFIED
- ☐ SUBMIT TO DET 1 AFRL/WST FOR PRINTING (IF NEEDED] AND/OR DISTRIBUTION
 - ☐ INDICATE NUMBER OF PRINTED COPIES DESIRED
 - ☐ PROVIDE MAILING LABELS FOR DISTRIBUTION (INCLUDE AF 310s IF SECRET)
 - ☐ ORIGINAL MANUSCRIPT RETURNED TO MONITOR FROM PRINTERS
 - ☐ PRINTED COPIES SENT TO MAILING LABEL LOCATIONS
 - ☐ EXTRA COPIES FORWARDED TO MONITOR
- ☐ ANNOTATE CASE FILE DATA WHEN DTIC FORM 50 IS RECEIVED WITH ASSIGNED "AD" NUMBER

STINFO/Technical Editing Section

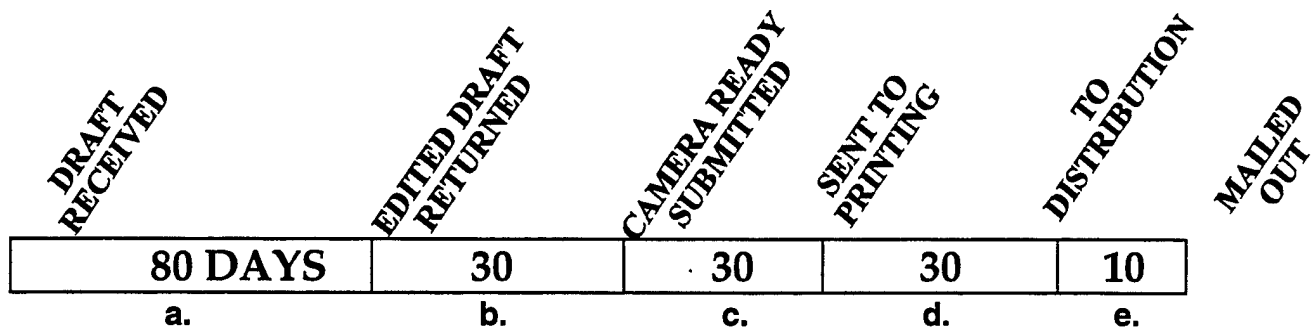
Tel. # 937-255-5197, DSN 785-5197

FAX # 937-255-5383, DSN 785-5383

DATA ITEM DESCRIPTION			Form Approved OMB No. 0704-0188	
<p>Public reporting burden for this collection of information is estimated to average 110 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing this collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, D.C. 20503.</p>				
1. TITLE		2. IDENTIFICATION NUMBER		
Scientific and Technical Reports		DI-MISC-80711		
3. DESCRIPTION/PURPOSE				
<p>3.1 Scientific and Technical Reports describe and disseminate to the analytical, scientific and technical community the precise nature and results of analytical studies, research, development, test and evaluation (RDT&E) on an assigned task(s). Scientific and Technical Reports may be definitive for the subject presented, exploratory in nature, or an evaluation of critical subsystem or of technical problems.</p>				
4. APPROVAL DATE (YYMMDD)	5. OFFICE OF PRIMARY RESPONSIBILITY (OPR)	6a. DTIC APPLICABLE	6b. GIDEP APPLICABLE	
881202	S/DD	X		
7. APPLICATION/INTERRELATIONSHIP				
<p>7.1 This DID contains the format requirements and preparation instructions for the information product generated by the specific and discrete task requirement as delineated in the contract.</p> <p>7.2 This DID is applicable to the organization, preparation and production of technical publications.</p> <p>7.3 This DID supersedes UDI-S-23272C, DI-S-4057 and DI-S-3591A.</p> <p>7.4 Defense Technical Information Center (DTIC) Cameron Station Alexandria, VA 22304-6145</p>				
8. APPROVAL LIMITATION		9a. APPLICABLE FORMS	9b. AMSC NUMBER	
		SF 298	S4578	
10. PREPARATION INSTRUCTIONS				
<p>10.1 <u>Reference document</u>. The applicable issue of the documents cited herein, including their approval dates and dates of any applicable amendments, notices, and revisions, shall be as specified in the contract.</p> <p>10.2 Document format shall be in accordance with ANSI Z39.18 Scientific and Technical Reports: Organization, Preparation and Production.</p> <p>10.3 Document content shall be clearly written, describe accomplishments and other facts adequately and with no technical errors, and be acceptable for release. If Scientific and Technical Reports when sent to DTIC are marked unclassified unlimited they should be accompanied by a letter certifying that they have been cleared for public release and sale; to include foreign nationals.</p>				
11. DISTRIBUTION STATEMENT				
DISTRIBUTION STATEMENT A. Approved for public release; distribution is unlimited				

MATERIAL INSPECTION AND RECEIVING REPORT						Form Approved OMB No. 0704-0248	
Public reporting burden for this collection of information is estimated to average 30 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to: Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0248), Washington DC 20503.							
PLEASE DO NOT RETURN YOUR COMPLETED FORM TO EITHER OF THESE ADDRESSES. SEND THIS FORM IN ACCORDANCE WITH THE INSTRUCTIONS CONTAINED IN THE DFARS, APPENDIX F-401.							
1. PROC. INSTRUMENT IDEN. (CONTRACT) F33615-98-C-0546		(ORDER) NO.		6. INVOICE NO./DATE		7. PAGE 1 OF 1	
2. SHIPMENT NO. RSC0001Z		3. DATE SHIPPED		4. B/L TCN		5. DISCO UNIT TERMS	
9. PRIME CONTRACTOR ABC Service Company 2 Wayside Road Blvd Durlington MA 01803				10. ADMINISTERED BY DPRO ABC Spencer Lab, Wayside AvenueD Durlington MA 01803-0901			
11. SHIPPED FROM (If other than 9) Same as Block 9				12. PAYMENT WILL BE MADE BY DFAS-Columbus Center DFAS-CO/Bunker Hill P.O. Box 182077 Columbus OH 43218-2077			
13. SHIPPED TO AFRL/SNRR ATTN: Vance Skowronski WPAFB AFB OH45433-7623				14. MARKED FOR Same as Block 13			
15. ITEM NO.	16. STOCK/PART NO. <i>(Indicate number of shipping containers - type of container - container number.)</i>	DESCRIPTION	17. QUANTITY SHIPREC'D*	18. UNIT	19. UNIT PRICE	20. AMOUNT	
0001	R&D Computer Software		1		555.000	555.00	
0008	Technical Report		1		0.000	0.00	
This completes all requirements for contract F33615-98-C-0546. No final DD 254 required.							
21. CONTRACT QUALITY ASSURANCE						22. RECEIVER'S USE	
A. ORIGIN <input type="checkbox"/> CQA <input type="checkbox"/> ACCEPTANCE of listed items has been made by me or under my supervision and they conform to contract, except as noted herein or on supporting documents.			B. DESTINATION <input type="checkbox"/> CQA <input checked="" type="checkbox"/> ACCEPTANCE of listed items has been made by me or under my supervision and they conform to contract, except as noted herein or on supporting documents.			Quantities shown in column 17 were received in apparent good condition except as noted.	
DATE TYPED NAME AND OFFICE			DATE TYPED NAME AND TITLE			DATE RECEIVED SIGNATURE OF AUTH GOVT REP	
			05MAY98 THOMAS MAGNUM Chief, Investigative Lab Division				
23. CONTRACTOR USE ONLY							

TIME FRAMES FOR TECHNICAL REPORT PUBLISHING



- a. This is a CDRL item. The AF has 80 days to accept or reject the draft (approval copy). Submit draft to Det 1 AFRL/WST for editing as soon as it's received.
- b. This is a CDRL item. The contractor has 30 days in which to resubmit a camera ready manuscript
- c. Prepare distribution lists and labels. Obtain notice page signature. Bring to STINFO. They will prepare printing order and do compliance check.
- d. Printing by Defense Automated Printing Service.
- e. Distribution handled by base distribution center.
- f. AF instructions require TR publishing to be completed within 180 days.

SECTION 2

TYPES OF REPORTS

All research and development (R&D) sponsored in whole or in part by DoD activities must be documented and disseminated whether or not efforts resulted in a successful outcome. This includes in-house and contractual efforts.

The results of R&D conducted or sponsored by AFRL or ASC can be published in a variety of ways: technical reports, articles in professional journals, conference or symposium proceedings, lecture series books or a single chapter in a book, or technical papers. The choice of a publication medium should be governed by the nature of the information involved and its use. The ultimate decision on how and where to publish normally will be made by the monitor/author within the established policy of DoD, USAF, AFRL, ASC and its respective organizations.

An R&D effort or study is not considered complete until it is documented and disseminated. One copy will be placed in the Det 1 AFRL/WST technical reports archive, and one copy will be forwarded to the Defense Technical Information Center (DTIC).

TECHNICAL REPORTS (TRs)

A technical report, per DoDI 3200.14, is any preliminary interim or final technical document (regardless of media) prepared to record, document, share results or make recommendations made on, or relating to, DoD-sponsored or cosponsored scientific, technical studies, or analytical work. TRs normally detail empirical findings and may include or be composed of journal articles, symposia proceedings, handbooks, or user guides. TRs usually have 15 or more pages.

TECHNICAL MEMOS (TMs)

A technical memo should be published to preserve or control information not deemed suitable for publication as a TR. Materials published as TMs include (but are not limited to): journal articles, documented efforts of less than 15 pages, or working papers having permanent value.

SECTION 3

LEGEND ☐ STINFO USE ONLY

REQUEST FOR EDITING AND PUBLISHING SUPPORT				REPORT NUMBER	
ROUTE	LEVEL	IN DATE	IN ED	OUT DATE	OUT ED
1. CONTRACT NUMBER F33615-98-C-5908		2. PROGRAM ELEMENT 62712E		3. JON 83550004	
4. MONITOR N Bridges		5. SYMBOL AFRI/PRSC		6. PHONE 937-255-2465 ext 1234	
7. <input type="checkbox"/> NO PRINTING (DTIC & Library Only) send: SF 298, this FORM, signed Notice Page, 2 copies of report		<input type="checkbox"/> COMPLIANCE CHECK & PRINT send: SF 298, this FORM, signed notice page, mailing labels		<input checked="" type="checkbox"/> EDIT, RETURN FOR CAMERA READY send: SF 298, this FORM	
8. TITLE Development of Methods Including Methods for					
9. SUBTITLE					
10. CONTRACTOR AVCON INC.					
11. TYPE REPORT <input type="checkbox"/> FINAL <input checked="" type="checkbox"/> INTERIM		12. INCLUSIVE DATES (MO/YR) FROM: 3 Mar 94 TO: 3 Mar 98		13. PAGE COUNT 179	
14. CLASSIFICATION <input checked="" type="checkbox"/> UNCLASSIFIED <input type="checkbox"/> CONFIDENTIAL <input type="checkbox"/> SECRET		15. WARNING <input type="checkbox"/> NF <input type="checkbox"/> RD <input type="checkbox"/> FRD			
16. DTIC EXEMPT <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO		17. DTIC EXEMPT REASON			
18. Y N <input checked="" type="checkbox"/> <input type="checkbox"/> SF 298 INCLUDED <input checked="" type="checkbox"/> <input type="checkbox"/> NOTICE/RELEASE PAGE INCLUDED <input type="checkbox"/> <input checked="" type="checkbox"/> CONTAINS LICENSE RIGHTS (SBIR) <input type="checkbox"/> <input checked="" type="checkbox"/> CONTAINS PROPRIETARY (Limited Rights) <input type="checkbox"/> <input checked="" type="checkbox"/> CONTAINS SOFTWARE OR CODE		Y N <input type="checkbox"/> <input checked="" type="checkbox"/> CONTAINS EXPORT CONTROLLED INFORMATION <input type="checkbox"/> <input checked="" type="checkbox"/> LAB DIRECTORS FUNDS USED <input type="checkbox"/> <input checked="" type="checkbox"/> SBIR PHASE 1 (send 2 copies) <input type="checkbox"/> <input checked="" type="checkbox"/> SBIR PHASE 2 <input type="checkbox"/> <input checked="" type="checkbox"/> COPYRIGHT			
19. DISTRIBUTION STATEMENT (Check one) <input checked="" type="checkbox"/> A: Approved for public release, distribution unlimited <input type="checkbox"/> B: Distribution authorized to US Government agencies only (reason)(date of determination). Other requests for this document shall be referred to controlling DOD office). <input type="checkbox"/> C: Distribution authorized to US Government agencies and their contractors (reason) (date of determination). Other requests for this document shall be referred to (controlling DOD office). <input type="checkbox"/> D: Distribution authorized to Department of Defense and US DOD contractors only (reason) (date of determination). Other requests for this document shall be referred to (controlling DOD office). <input type="checkbox"/> E: Distribution authorized to DOD components only (reason) (date of determination). Other requests for this document shall be referred to (controlling DOD office). <input type="checkbox"/> F: Further dissemination only as directed by (controlling office) (date of determination) or DOD higher authority. <input type="checkbox"/> X: Distribution authorized to US Government Agencies and private individuals or enterprises eligible to obtain export-controlled technical data in accordance w/DODD 5230.25 (date of determination). Controlling DOD office is (insert)					
20. REASON: (Check one) <input type="checkbox"/> ADMINISTRATIVE OR OPERATIONAL USE <input type="checkbox"/> CONTRACTOR PERFORMANCE EVALUATION <input type="checkbox"/> CRITICAL TECHNOLOGY <input type="checkbox"/> DIRECT MILITARY SUPPORT <input type="checkbox"/> TEST & EVALUATION		<input type="checkbox"/> FOREIGN GOVERNMENT INFORMATION <input type="checkbox"/> PREMATURE DISSEMINATION <input type="checkbox"/> PROPRIETARY INFORMATION <input type="checkbox"/> SOFTWARE DOCUMENTATION <input type="checkbox"/> SPECIFIC AUTHORITY		REPORT NUMBER	
21. PA (Public Affairs) Number and Date Cleared: ASC 98-1234 4 MAR 98					
22. REMARKS:					
23. SUPERVISOR'S SIGNATURE Joseph A. Burke					

WL FORM 79 JUN 96 (EF) (FORMFLOW)

REPORT DOCUMENTATION PAGE			This info should be the same as on cover and WL 79		Form Approved OMB No 0704-0188	
1. AGENCY USE ONLY (LEAVE BLANK)		2. REPORT DATE APRIL 1998		3. REPORT TYPE AND DATES COVERED FINAL 12/01/92--12/01/97		
4. TITLE AND SUBTITLE MEMORY-BASED COMPUTATIONAL INTELLIGENCE FOR MATERIALS PROCESSING AND DESIGN				5. FUNDING NUMBERS C: F33615-98-C-5250 PE 62102 PR 2306 TA P9 WU 03		
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) Rose, P.E. University of Cincinnati Engineering Department Cincinnati OH 42197-1414				8. PERFORMING ORGANIZATION If in-house, leave blank		
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES) Your Directorate Air Force Research Laboratory Air Force Materiel Command Wright Patterson Air Force Base, Ohio 45433-7734 POC: Monitor name, organization, phone				10. SPONSORING/MONITORING AGENCY REPORT NUMBER AFRL-SN-WP-TR-1998-1035		
11. SUPPLEMENTARY NOTES [If a non-Statement A document with export control, enter in this block: EXPORT CONTROL RESTRICTIONS APPLY]						
12a. DISTRIBUTION/AVAILABILITY STATEMENT Approved for Public Release; Distribution is Unlimited				12b. DISTRIBUTION CODE Must match WL 79 & Notice Page Always leave this (12b) block blank		
13. ABSTRACT (Maximum 200 words) The work reported in this document is concerned with the efficient use of computers in materials research and in applications of the results of that research. Emphasis is on the development of computational methodologies which can facilitate the innovative design of materials and of materials processing, for high performance materials and for composite materials structures. Basic advances have been made in three areas of adaptive computing: in establishing the practice of functional-link neural-net computing for learning models of material behavior, in developing a parallel processing evolutionary search paradigm for optimization, and in exploring various ways of establishing and using associative memories.						
14. SUBJECT TERMS Neural Networks Evolutionary Programming Product Formulation Optimization Process Monitoring Intelligent Control				15. NUMBER OF PAGES 66		
17. SECURITY CLASSIFICATION OF REPORT UNCLASSIFIED				16. PRICE CODE		
18. SECURITY CLASSIFICATION OF THIS PAGE UNCLASSIFIED		19. SECURITY CLASSIFICATION OF ABSTRACT UNCLASSIFIED		20. LIMITATION OF ABSTRACT SAR		

This is Always page # i

Always SAR (Same As Report)

REPORT DOCUMENTATION PAGE			Form Approved OMB No. 0704-0188	
<small>Public reporting burden for this collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503.</small>				
1. AGENCY USE ONLY (Leave blank)	2. REPORT DATE 1 APR 98	3. REPORT TYPE AND DATES COVERED Final 1 JUL 1997 - 5 MAR 1998		
4. TITLE AND SUBTITLE THE REDUCTION OF COINCIDENTAL AND INTENTIONAL ELECTROMAGNETIC INTERFERENCE USING ANTI-GRAVITY BUFFERS		5. FUNDING NUMBERS C: F33615-93-C-3608 PE: 65502 PR: 3005 TA: 40 WU: K4		
6. AUTHOR(S) A. LEEANNE NATED RALPH W. EMERSON WILLIAM CULLEN BRYANT		8. PERFORMING ORGANIZATION REPORT NUMBER		
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) PROTO INTELLIGENT ELECTRONICS 77 OCENVIEW DRIVE, EXECUTIVE SUITE 789 COVINGTON, OH 45456-5654		10. SPONSORING/MONITORING AGENCY REPORT NUMBER AFRL-SN-WP-TR-1998-1234		
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES) SENSORS DIRECTORATE AIR FORCE RESEARCH LABORATORY AIR FORCE MATERIEL COMMAND WRIGHT-PATTERSON AFB OH 45433-7562 POC: MONITOR'S NAME, AFRL/XXXX, 937-255-xxxx, ext. xxxx		11. SUPPLEMENTARY NOTES EXPORT RESTRICTIONS APPLY		
12a. DISTRIBUTION AVAILABILITY STATEMENT DISTRIBUTION AUTHORIZED TO US GOVERNMENT AGENCIES ONLY. PROPRIETY INFORMATION, APRIL 1998. OTHER REQUESTS FOR THIS DOCUMENT SHALL BE REFERRED TO AFRL/SNXX, WPAFB, OH 45433-xxxx		12b. DISTRIBUTION CODE		
13. ABSTRACT (Maximum 200 words) REPORT DEVELOPED UNDER SBIR CONTRACT. THIS SBIR PHASE I REPORT DOCUMENTS IN MINUTE DETAIL THE FINDINGS REVEALED IN RESEARCH INTO THE				
14. SUBJECT TERMS SBIR REPORT, xxxxxxxxxxxxxx, xx, xxxxxxxx, xxxxx xxxxxxxx		15. NUMBER OF PAGES 16 16. PRICE CODE		
17. SECURITY CLASSIFICATION OF REPORT UNCLASSIFIED	18. SECURITY CLASSIFICATION OF THIS PAGE UNCLASSIFIED	19. SECURITY CLASSIFICATION OF ABSTRACT UNCLASSIFIED	20. LIMITATION OF ABSTRACT SAR	

Standard Form 298 (Rev. 2-89) (EG)
Prescribed by ANSI Std. Z39.18
Designed using Perform Pro, WHS/DIOR, Oct 94

SBIR ONLY



DEPARTMENT OF THE AIR FORCE

AIR FORCE RESEARCH LABORATORY (AFMC)
WRIGHT-PATTERSON AIR FORCE BASE, OHIO

SAMPLE

MEMORANDUM FOR: ASC/PA (Ms. Sharon Reed)

00 MONTH 97

FROM: [OFFICE SYMBOL OF REQUESTING ORGANIZATION]

SUBJECT: Request for Public Release approval (AFI 35-205) **SAMPLE**

1. Please review the attached material for public release approval. The following information is provided in support of this request:

- a. TYPE OF INFORMATION: (technical paper, journal article, abstract, technical report, etc.)
Technical Report (GIVE TR # IF ASSIGNED)
- b. TITLE : INTELLIGENCE ENHANCEMENT THROUGH USE OF ARC LIGHTING
- c. AUTHOR(S): (name, title, organization) J. J. Doe, J. A. Smith, and T. Rex

If co-authored by other government entities (i.e., Army, Navy, NASA, ARPA, etc.), did you obtain their organization's coordination and attach a signed copy? Yes ___ No ___

- d. CONTRACT # and company name: F33615-98-C-0000
JOB ORDER NUMBER (JON) MANDATORY: 1234567B
Contains DD 254 Yes ___ No X
Refers to Security classification Guide Yes ___ No X
- e. PUBLICATION AND/OR SUBMITTAL DEADLINE: 00 MONTH 98

f. PRESENTATION TO (give sponsoring organization or technical society, location (city and state) and exact date (FOR CLOSED SESSIONS--PUBLIC RELEASE APPROVAL IS NOT REQUIRED):
Roswell Society for Intelligence Transplantations, Roswell NM on 00 MONTH 98

2. The information contained in this material is complete with figures/legible photos/text with briefing charts/videos and scripts.

3. This material is unclassified, technically accurate, nonproprietary and considered suitable for public release. It contains no computer software, owned or developed by or for the government. Export restrictions (i.e., MCTL, Munitions List (ITAR) and CCL) and current AF/DOD policy have been considered prior to requesting public release approval.

ASC/PA APPROVAL

SIGNED

THE NAME, Asst for Research & Technology
Light Fixtures Division, Stellar Directorate

(Division level signature/title)

(Higher echelon signature--if applicable)

ADDITIONAL INFORMATION

1. The following statement is applicable (check one)

(X) All references are unclassified/unlimited and are available to the public.

() References # _____ are subject to distribution limitation. No limited information from these references is included in the document for which clearance is being requested.

() No references are contained in attached material.

SIGNED

Signature of Requester

Date

00 MONTH 98

2. The technology contained in the material proposed for release:

a. Is (1) being applied, (2) nearing application (maturing), (3) 3 years or more away from application (select one or more, as appropriate).

b. Resulted from technical efforts funded under Program Element _____ (identify PE, i.e., 6.1, 6.2, etc.).

ARPA FUNDED, has management responsibility been transferred to Air Force Research Laboratory? Yes _____ No _____

SMALL BUSINESS (SBIR) FUNDED (6.5), have limitations been considered?

Yes X No _____

c. Is the latest state of the art: Yes X No _____

d. Has subject matter previously been released to the public: Yes _____ No X

e. Intended application: (if applicable, name specific weapon system or BMW related) This is a generic study and not applicable to any specific weapon systems

3. Other applicable comments or rationale to justify clearance for public release, i.e., previously cleared case numbers: None

4. Government point of contact (name, symbol, and telephone): Lt. G.I.Flywright, AFRL/LIT, 54321

**MANDATORY ADDRESSES
FOR ALL
WRIGHT LABORATORY TECHNICAL REPORTS**

**DTIC - OMI
8725 JOHN J. KINGMAN RD STE 0944
FT BELVOIR VA 22060-6218**

(DTIC receives 2 copies of all documents)

**AUL/LSAD Bldg 1405
600 Chennault Circle
Maxwell AFB AL 36112-6424**

**Det 1 AFRL/WST
Bldg 570 Rm S120E
2690 C Street
Wright-Patterson AFB OH 45433-7411**

**(Det 1 AFRL/WST receives 2 copies of all Statement A reports – a 2nd
copy will be furnished to GIDEP)**

**SAF/AQ
Pentagon
Washington DC 20330-1000**

(Reports from work funded by PE 61101F ONLY)

**NSA (P2213)
9800 Savage Road
Ft George G Meade MD 22705-5000
(COMINT, ELINT, and COMSEC related reports ONLY)**

**ASC/NAIC/TIA Bldg 11A
1970 Monahan Way Ste 1
Wright-Patterson AFB OH 45433-7208
(Materials containing intelligence ONLY)**

MAILING LABELS

All addresses must have the ZIP +4 code.

All mailings of classified must be to approved addresses--it is the responsibility of the producing agency to authenticate.

All mailings of limited distribution materials to contractors must be to verified addresses -- producing agency must authenticate.

Labels must be self-adhesive. Labels requiring "wetting" cannot be used and will be returned for reaccomplishment.

SENDING ORGANIZATION OFFICE SYMBOL STREET ADDRESS AFB ST 45430-7734 <i>Official Business</i>	RECEIVING ORGANIZATION OFFICE SYMBOL STREET ADDRESS AFB 12345-6789
--	---

[actual size of label is 2" x 4"]

FOR CLASSIFIED: PLACE RETURN ADDRESS ON SEPARATE LABEL

NOTE: Return address should be in upper left corner as above, and the addressee down and indented similar to above. Do not have both the return address and addressee left aligned—the post office will return because scanners may not work

SAMPLE

DOCUMENT RECEIPT & DESTRUCTION CERTIFICATE

AF FORM 310 (FOR SECRET REPORTS)

DOCUMENT RECEIPT AND DESTRUCTION CERTIFICATE			
1. TO: Company Name [or Office Symbol] Attn: John Doe Street Address CITY, STATE Zip		2. FROM: 88th CG/SCCIAPD Bldg 281 (VAULT) 4165 Communications Blvd, Door 11 Wright-Patterson AFB, OH 45433-5603	
		3. DATE	
		4. CONTAINER NO.	
5. DESCRIPTION OF DOCUMENT(S): <i>(Indicate overall classification, originator, type (letter, message, plan, etc.), date, unclassified subject title, number of copies, and originator control number and copy number if Top Secret. Also use these data elements for identifying any attachments that would require a receipt if transmitted separately.)</i> (SECRET) AFRL-SN- WP-TR-1998-1102, "TITLE....." (U), DATED Jan 98 (1 copy)			
TO AVOID TRACER ACTION, RETURN SIGNED RECEIPT BY [REDACTED]			6. DATE
DOCUMENT RECEIPT			
I ACKNOWLEDGE RECEIPT OF THE ABOVE DOCUMENTS			
7. DATE RECEIVED	8. NAME, ORGANIZATION, AND PHONE NUMBER (DSN)		9. SIGNATURE OF RECIPIENT
DESTRUCTION CERTIFICATE			
10. THE DOCUMENT(S) LISTED ABOVE WERE	DESTROYED	COMMITTED TO CENTRAL DESTRUCTION FACILITY ON [REDACTED]	11. DATE
12. TYPED OR PRINTED NAME AND SIGNATURE OF WITNESSING OFFICIAL		13. TYPED OR PRINTED NAME AND SIGNATURE OF WITNESSING OFFICIAL	

AF FORM 310, NOV 95 (EF-V1) (PerFORM PRO) PREVIOUS EDITION WILL BE USED.

DOCUMENT RECEIPT AND DESTRUCTION CERTIFICATE			
1. TO:		2. FROM:	
		3. DATE	
		4. CONTAINER NO.	
5. DESCRIPTION OF DOCUMENT(S): <i>(Indicate overall classification, originator, type (letter, message, plan, etc.), date, unclassified subject title, number of copies, and originator control number and copy number if Top Secret. Also use these data elements for identifying any attachments that would require a receipt if transmitted separately.)</i>			
TO AVOID TRACER ACTION, RETURN SIGNED RECEIPT BY [REDACTED]			6. DATE
DOCUMENT RECEIPT			
I ACKNOWLEDGE RECEIPT OF THE ABOVE DOCUMENTS			
7. DATE RECEIVED	8. NAME, ORGANIZATION, AND PHONE NUMBER (DSN)		9. SIGNATURE OF RECIPIENT
DESTRUCTION CERTIFICATE			
10. THE DOCUMENT(S) LISTED ABOVE WERE	DESTROYED	COMMITTED TO CENTRAL DESTRUCTION FACILITY ON [REDACTED]	11. DATE
12. TYPED OR PRINTED NAME AND SIGNATURE OF WITNESSING OFFICIAL		13. TYPED OR PRINTED NAME AND SIGNATURE OF WITNESSING OFFICIAL	

AF FORM 310, NOV 95 (EF-V1) (PerFORM PRO) PREVIOUS EDITION WILL BE USED.

SECTION 4

Major Section	Required Elements	Optional Elements	Explanatory Comment
FRONT MATTER: Page numbers of Front Matter: always page i → (ii is the back side of i) iii (always) → iv v vi vii etc.	Cover		protects printed report
	Title Page		provides information for description and bibliographic control
	Notices		used on cover and title page to call attention to restrictions or limitations on distribution
	Report Documentation Page (Includes Abstract)		used by federal agencies for database building; briefly informed of purposes, scope, and findings
	Table of Contents		outlines organization & scope of a report
	List(s) of Figures and Tables		required for 5 or more figures or tables or any combination thereof; optional for fewer than 5
		Foreword	provides background or context for a report
		Preface	announces purpose and scope; acknowledges contributions of non-authors
		Acknowledgments	used if acknowledgments are too lengthy to present in preface
TEXT (BODY) Page Numbers 1 2 3 4 etc.	Summary		summarizes problem, results, conclusions, recommendations
	Introduction		states subject, purpose, scope and plan for developing report
	Methods, Assumptions, and Procedures		describes research methodology
	Results and Discussions		presents findings and discusses their significance
	Conclusions		presents substantiated findings, discusses their implications, and presents author's opinion
		Recommendations	suggests a course of action
	References		cites sources of information used by author(s) of report
BACK MATTER We require this only for classified reports →		Appendixes	contain supplemental information not essential to the text
		Bibliography	lists additional sources of information not cited in the text of a report
	List(s) of Symbols, Abbreviations, and Acronyms		used to explain the meaning of symbols, abbreviations, and acronyms; needed if there are more than 5 not readily recognized as standard
		Glossary	defines and explains unfamiliar terms
		Index	lists major topics alphabetically; not required in reports of fewer than 50 pages
		Distribution List	gives permanent record of initial distribution of a report

COVER PAGE

NOTICE PAGE

SF 298

i

BACK OF SF 298

ii

TABLE OF CONTENTS

iii

LIST OF FIGURES

iv

LIST OF TABLES

v

FOREWORD

vi

PREFACE

vii

DOCUMENT - INTRODUCTION

1

2

etc.

FORMAT FOR AFRL/ASC PUBLICATIONS:

American National Standards Institute Standard (ANSI/NISO) Z39.18 - 1995, Scientific and Technical Reports: Organization, Preparation, and Production specifies the format for scientific and technical reports prepared by or for the Department of Defense. AFRL/ASC reports must be prepared in accordance with this standard. This ANSI standard is available at no cost (up to 5 copies) to DoD organizations through:

Standardization Document Order Desk

Bldg 4D

700 Robbins Ave., Bldg 4D

Philadelphia PA 19111-5098

Telephone #: (215) 697-2667

PLEASE NOTE:

THIS USER'S GUIDE HAS BEEN PREPARED TO PROVIDE DETAILED INSTRUCTIONS FOR SPECIFIC AIR FORCE AND AFRL REQUIREMENTS. THESE ADDITIONAL INSTRUCTIONS ENHANCE THE BASIC REQUIREMENTS SET FORTH IN THE AMERICAN NATIONAL STANDARDS INSTITUTE STANDARD (ANSI/NISO) Z39.18 - 1995 AND THE AFI's GOVERNING THE REPORTING, DISTRIBUTION, ETC., OF R&D EFFORTS.

COVER:

Type report number in the upper left corner of cover page. Title of paper is placed under the report number in capital letters. Format for cover should be consistent throughout each organization, but must contain information required by ANSI/NISO Z39.18 - 1995. See Samples ON PAGES 29-34.

NOTICES (INSIDE FRONT COVER):

The inside front cover, "Notice Page," contains the review and approval statement as well as special notices and signatures.

When it is necessary to call attention to certain aspects of a report, such as its security classification, restricted distribution, or proprietary information, appropriate notices shall be placed on the cover and title page, or other pages as needed (as in NOFORN, etc.).

PAGE NUMBERS:

Number all front matter at bottom center in lower case Roman numerals (i, ii, iii, iv...). The body of the report should be numbered consecutively at the bottom center in Arabic numbers (1, 2, 3, 4...), beginning with a right-hand page.

SPACING:

Use double spacing throughout the text in all manuscripts submitted for editing. Use single or 1-1/2 line spacing for camera-ready copy.

REPORT DOCUMENTATION PAGE, STANDARD FORM 298

A complete SF 298 is included as the first right-hand page after the cover in each report and should be numbered as page i. Confine abstract to the front portion of block 13. Use the back of the SF 298 only if unavoidable (see samples in Section 3) if necessary.

ABSTRACT

An abstract presents a concise statement (maximum 200 words of the purpose, scope, and major findings of the report). It must be understandably independent of the rest of the report. It should not contain any undefined symbols and should not make reference by number to references or illustrative material. ANSI/NISO Z39.14-1979, American National Standard for Writing Abstracts, is the standard guide for preparing abstracts for scientific and technical reports.

TABLE OF CONTENTS:

A table of contents is seldom used in a report of eight pages or less. List principal headings as they appear in the report and the page numbers on which the headings occur. The table of contents begins with page number iii.

LIST OF FIGURES AND TABLES:

A report that contains five or more figures or tables is required to indicate these by using a List of Figures and/or a List of Tables. A list is optional for five or fewer figures or tables. The lists follow the Table of Contents page.

FOREWORD:

The foreword is an optional introductory statement that presents background material. It is written by an authority other than the report's author. The Foreword should come before the Preface and Summary.

[IMPORTANT NOTE: "FOREWORD," is one of the most frequently misspelled words in a technical report. It is NOT spelled "FORWARD," "FOREWARD or FORWARD."]

PREFACE

An optional introductory statement that announces the purpose and scope of the report and acknowledges any contributions for individuals not identified as authors or editors.

SUMMARY:

A summary is a required element of the text of a report. It clearly states the problem, the key points of the report, major results, conclusions and recommendations. The summary should never introduce material not found elsewhere in the text. Only information presented in the text of the report should be included in the summary.

HEADINGS:

Headings and subheadings of text are indicated by boldface type with initial capital letters for principal words. Primary headings may have larger type.

(SAMPLE HEADINGS)

1. Methods and Materials (main heading)

1.1 Design of Equipment (subheading)

FIGURES:

Size: The desired size depends on the legibility of printed material on the figure and the amount of detail. To fit upright on a page in a report, the horizontal dimension (base image) should not exceed 6-1/2 inches. To fit lengthwise on a page, the horizontal dimension should not exceed 9 inches.

FIGURES/TABLES:

Numbering: Number figures/tables consecutively in Arabic numerals preceded by the word "Figure/Table." Do not use section numbering. Number the figures/tables within appendixes with the appendix designation (for example, in Appendix A, the tables will be numbered A-1, A-2, A-3).

Lines: Use a horizontal line to separate the column boxheads from the body of the table. Avoid other vertical and horizontal lines wherever spacing can be used effectively.

Titles (captions): Give the figure/table number followed by the title. All major words in the title have the first letter capitalized. Figure number and title are placed **below** the figure. Table number and title are placed **above** tables. Column headings within the table are in lowercase letters except for the first letter of the first word and any proper nouns.

Table 1. Effects of a Prolonged Exposure to Oxygen in a Weightless Environment

Oxygen debt^a	Ambient pressure (mm Hg)
--------------------------------	-------------------------------------

(Table information is inserted under column headings)

Superscript letters a, b, c, etc., indicate footnotes to table.

Figure 1. Sample Table Layout

FOOTNOTES IN TEXT:

Explanatory footnotes are included in a report only to clarify text information and should be as brief and clear as possible. To avoid preparing footnotes, an author may incorporate material into the text by enclosing it in parentheses or by placing it in a separate paragraph.

When used to clarify information, footnotes are keyed to the text of the report with superscript Arabic numbers. Footnotes are placed at the bottom of a page and separated from the text by a 12-space horizontal line. The footnote marking sequence starts over on each new page. If a footnote runs longer than its page margin, it is completed at the bottom of the subsequent page, preceding any footnotes from the next page. When a footnote is needed to clarify tabular information, a superscript sequence of lowercase letters or symbols should be used to avoid confusion with text footnotes. Footnotes do not appear in an abstract.

Footnotes should be typed flush left at the foot of the page on which their reference numbers or symbols appear.

Example:

¹The Chicago Manual of Style (13th edition) provides additional information on footnoting.

The referenced footnote number or symbol in the text is typed a half-space above the appropriate line of text without any type of restrictive mark or punctuation. Footnotes to tables should be typed directly below the table.

REFERENCES: Last section of the text, new page.

TEXT REFERENCE: All references include: name of author, title of reference work, publication data, and National Technical Information Service number (if government). There are two reference forms: (1) number-identification system, and (2) author-date format (alphabetical). In the numbering system, references are numbered consecutively with arabic numbers (in order of their first appearance in the text), and fully identified in the list of references. In the author-date format, authors' names and dates of publication are cited in the text in parenthesis and keyed to an alphabetically arranged list of references.

Classified documents should NEVER be referenced in an unclassified work. If limited documents are referenced in an unclassified/unlimited document, the following statement should accompany the reference: Limited document [reason, i.e., critical technology], but no limited information from this reference has been included in this report.

APPENDICES: When one or more appendices are used, designate them with a capital letter, i.e., Appendix A, Appendix B. Number figures, tables, and equations with the letter designation of the appendix in which they fall (for example, A-1, B-1). Title each appendix below appendix designation. Consecutive arabic page numbers, bottom center, are used for the pages of the test (body), appendixes and other back matter (throughout the entire report).

BIBLIOGRAPHY:

A bibliography lists sources of information not referenced in the text. Like text references, **Classified documents should NEVER be referenced in an unclassified work.** If limited documents are referred to in an unclassified, unlimited document, the following statement should accompany the reference: **Limited document [reason, i.e., critical technology], but no limited information from this reference has been included in this report.**

Citing Internet/World Wide WEB

Citation styles for Internet publications are still evolving. Like most references, a Web document ideally should have an author, a title, and a date of publication. The nature of the document should be given in brackets immediately following the title, i.e. [Database], [Electronic data file], [FTP archive], [WWW document], etc.

Samples of citations:

FTP:

Bixley, T. S. (1995) *Sentient microfilaments: A tempest in a tubule.* [On-line].
<ftp://blahblah.princeton.edu/pub/harnad/psyc.95.3.26/conscious>.

World Wide Web page:

Bixley, T. S. (1995) *Sentient microfilaments Home Page.* [On-line].
<http://www.microfilaments.com/consciousness/synchronicity.html>.

For additional detailed guidance, please refer to the Web Extension to American Psychological Association Style (WEAPAS), Proposed standard for referencing on-line documents in scientific publications:

Land, T. [a.k.a Beads] (1996, September 26). *Web Extension to American Psychological Association Style (WEAPAS)* (Rev. 1.3.2) [WWW document].

<http://www.nyu.edu/pages/psychology/WEAPAS/>

Other sources:

Beckleheimer, J. (1994). *How do you cite URL's in a bibliography?* [WWW document]. <http://www.nrlssc.navy.mil/meta/bibliography.html>

Walker, J. R. (1995, April). *ACW style sheet; MLA-style citations of electronic sources* [WWW document].

<http://www.cas.usf.edu/english/walker/mla.html>

Glossary of Terms: The optional glossary of unfamiliar terms, arranged in alphabetical order, is part of the back matter. Define these terms in the text the first time they are used in the text.

SECTION 5

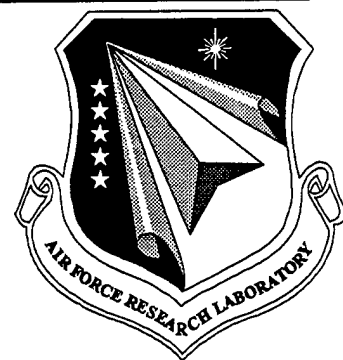
SAMPLE

UNCLASSIFIED/
UNLIMITED - IN HOUSE

SAMPLE

AFRL-SN-WP-TR-1998-XXXX

EXPLOITATION OF LASER LIGHTS



R. STEELE
B. JONES

SEPTEMBER 1998

FINAL REPORT FOR 1 MARCH 1994 - 30 SEPTEMBER 1998

Approved for public release; distribution unlimited

SENSORS DIRECTORATE [your directorate name]
AIR FORCE RESEARCH LABORATORY
AIR FORCE MATERIEL COMMAND
WRIGHT-PATTERSON AFB OH 45433-7XXX

SAMPLE

UNCLASSIFIED/
UNLIMITED
CONTRACTOR

SAMPLE

AFRL-VA-WP-TR-1998-XXXX

**SUMMARY REPORT OF THE DESIGN
FACILITY**



K. Russell
M. Gibson

Sunrise Laboratory
PO Box 400
Sample City NY 15213-5555

JULY 1998

FINAL REPORT FOR JULY 27, 1996 - JULY 26, 1998

Approved for public release; distribution unlimited

**AIR VEHICLES DIRECTORATE [your directorate name]
AIR FORCE RESEARCH LABORATORY
AIR FORCE MATERIEL COMMAND
WRIGHT-PATTERSON AIR FORCE BASE OH 45433-7XXX**

SAMPLE

**UNCLASSIFIED/LIMITED
(ASC) CONTRACTOR**

SAMPLE

ASC-TR-1998-XXXX

EXPLOITATION OF LASER LIGHTS



**R. STEELE
B. JONES**

**Company Name
Address
City, State and Zip**

SEPTEMBER 1998

FINAL REPORT FOR 1 MARCH 1996 - 30 SEPTEMBER 1998

Distribution authorized to US Government Agencies only, proprietary information; September 1998. Other requests for this document shall be referred to ASC/xxx, WPAFB OH 45433-7xxx.

WARNING - This document contains technical data whose export is restricted by the Arms Export Control Act (Title 22, USC, Sec 2751, et seq.) or the Export Administration Act of 1979, as amended (Title 50, USC, App 2401, et seq.). Violations of these export laws are subject to severe criminal penalties. Disseminate in accordance with provisions of DoD Directive 5230.25 (Include this statement with any reproduced portions.)

DESTRUCTION NOTICE - Destroy by any method that will prevent disclosure of contents or reconstruction of the document.

**YOUR DIVISION
AERONAUTICAL SYSTEMS CENTER
AIR FORCE MATERIEL COMMAND
WRIGHT-PATTERSON AFB OH 45433-7XXX**

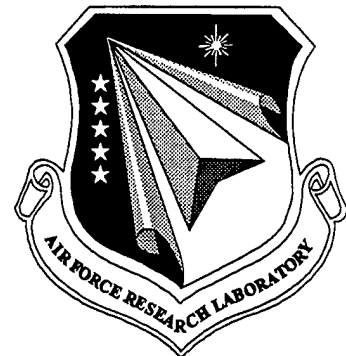
SAMPLE

UNCLASSIFIED/
LIMITED SBIR

SAMPLE

AFRL-IF-WP-TR-1998-XXXX

DYNAMIC AVIONICS REAL-TIME SCHEDULING



T. Magnum
N. Bridges

FRIENDS, INC
123 West 456th Street
WEST PALM BEACH, FLORIDA 33410-9600

JUNE 1998

FINAL REPORT FOR 02 JANUARY 1998 – 31 MAY 1998

THIS IS A SMALL BUSINESS INNOVATION RESEARCH (SBIR) PHASE I REPORT

**DISTRIBUTION AUTHORIZED TO U.S. GOVERNMENT AGENCIES ONLY;
PROPRIETARY DATA, MAY 1998. OTHER REQUESTS SHALL BE
REFERRED TO AFRL/XXX, WPAFB OH 45433-7xxx.**

WARNING - This document contains technical data whose export is restricted by the Arms Export Control Act (Title 22, U.S.C., Sec 2751, et seq.) or the Export Administration Act of 1979, as amended (Title 50, U.S.C. App. 2401, et seq.). Violations of these export laws are subject to severe criminal penalties. Disseminate in accordance with the provisions of DOD DIR 5230.25. *[Include this statement with any reproduced portions.]*

DESTRUCTION NOTICE - Destroy by any method that will prevent disclosure of contents or reconstruction of this document.

INFORMATION DIRECTORATE [your directorate name]
AIR FORCE RESEARCH LABORATORY
AIR FORCE MATERIEL COMMAND
WRIGHT-PATTERSON AIR FORCE BASE, OH 45433-7XXX

SAMPLE

**CLASSIFIED/
LIMITED**

SAMPLE

SECRET

AFRL-PR-WP-TR-1998-XXXX

**EXPLOITATION OF LASER LIGHTS DRAFT
REPORT (U)**

**T. JONES
P. PIPER**

**LASER EVALUATOR BRANCH
1234 AVIONICS CIRCLE
WPAFB OH 45430-7321**



**JANUARY 1998
FINAL REPORT FOR 01/01/95 -- 01/01/98**

**FURTHER DISSEMINATION ONLY AS DIRECTED BY AFRL/XXXX, WPAFB OH
45433-7XXX, JAN 1998; OR HIGHER DoD AUTHORITY.**

**WARNING - This document contains technical data whose export is restricted by the Arms
Export Control Act (Title 22, U.S.C., Sec 2751, et seq.) or the Export Administration Act of
1979, as amended (Title 50, U.S.C. App. 2401, et seq.). Violations of these export laws are
subject to severe criminal penalties. Disseminate in accordance with the provisions of DoD
DIR 5230.25. [Include this statement with any reproduced portions.]**

**DESTRUCTION NOTICE - Follow the procedures in DoD 5220.22-M, National Industrial
Security Program Operating Manual (NISPOM), section 5-705, or DoD 5200-1-R,
Information Security Program Regulation, Chapter IX.**

**Derived from: FTD-EXPLAN 200-91-3, 1 MAR 91
Declassify on: Source Document Marked "OADR"
Date of Source 1 MAR 91**

**PROPULSION DIRECTORATE [your directorate name]
AIR FORCE RESEARCH LABORATORY
AIR FORCE MATERIEL COMMAND
WRIGHT-PATTERSON AIR FORCE BASE OH 45433-XXXX**

SECRET

SAMPLE

TECH MEMO COVER

SAMPLE

AFRL-ML-WP-TM-1998-XXXX

**TRANSITION ON CASCADES AT LOW
REYNOLDS NUMBERS**



J. Hardcastle

AUGUST 1998

FINAL REPORT 1 JUNE 1998-9 JULY 1998

Approved for public release; distribution unlimited

[If journal article, include following statement]

This paper is declared a work of the U.S. Government and as such is not subject to copyright protection in the United States.

**MATERIALS & MANUFACTURING DIRECTORATE [your directorate name]
AIR FORCE RESEARCH LABORATORY
AIR FORCE MATERIEL COMMAND
WRIGHT-PATTERSON AIR FORCE BASE, OH 45433-7XXX**

SECTION 6

BY ORDER OF THE
SECRETARY OF THE AIR FORCE

AIR FORCE INSTRUCTION 61-204
27 JULY 1994

Scientific/Research and Development

DISSEMINATING SCIENTIFIC AND TECHNICAL INFORMATION

2. Marking Technical Documents with Distribution-Limitation and Export-Control Statements:

2.1. Mark all technical documents that may be disseminated outside the DoD with one of the seven distribution statements listed in attachment 2, and the following export control notice if the document contains export-controlled technical data. **NOTE:** Distribution

statements provide options ranging from unlimited distribution to no secondary distribution without specific approval of the originator. Review the data categories before assigning a distribution statement, and use only the statements in attachment 2. Fill in the reason, the date of determination, and the controlling DoD office.

WARNING—This document contains technical data whose export is restricted by the Arms Export Control Act (Title 28, U.S.C., § 1701) and the Arms Export Control Act of 1979, as amended (Title 50, U.S.C., § 1551). This document is subject to severe criminal penalties. Dissemination in accordance with provisions of DoD Directive 5230.25 and AFI 61-204.

Revised -
see sample warning on page 31 of this guide

2.2. When providing technical documents to personnel from another DoD activity, mark documents to minimize the chance that DoD personnel might inadvertently give documents to inappropriate recipients.

2.3. Mark unclassified limited documents (i.e., documents not approved for public release) and classified documents with the following:

DESTRUCTION NOTICE—For classified documents, follow the procedures in DoD 5220.2-R. This document contains technical data whose export is restricted by the Arms Export Control Act (Title 28, U.S.C., § 1701) and the Arms Export Control Act of 1979, as amended (Title 50, U.S.C., § 1551). This document is subject to severe criminal penalties. Dissemination in accordance with provisions of DoD Directive 5230.25 and AFI 61-204.

Revised -
see sample destruction on page 33 of this guide

Destroy by any method that will prevent disclosure of contents or reconstruction of the document.

2.4. You do not have to put a distribution statement on contractor-technical proposals or documents submitted in anticipation of award of contracts. Follow the guidelines in paragraphs 2.5.3 [correction: 2.6.3] and 6.3 when working with contractor technical proposals that contain contractor limited rights data.

2.5. Guidance on release of software is in AFI 33-114, *Command, Control, Communications, and Computer (C4) Software Management*. **NOTE:** Only the software developer or office of primary responsibility may release source code; secondary distribution is limited to the application software (the object code).

2.6. The following is specific guidance for assigning distribution statements:

2.6.1. Distribution statements A-X may be applied to unclassified Air Force technical documents, while only distribution statements B-F may be applied to classified documents.

AFI 61-204 Attachment 1 27 July 1994

2.6.2. When a classified document is declassified, retain the original distribution statement until the controlling office either removes or changes the statement. When a classified document is declassified and has no distribution statement, handle the document as distribution F until the controlling office assigns a distribution statement.

2.6.3. Mark and control scientific and technical documents that include contractor-imposed limited-rights legends and computer software that includes contractor-imposed restricted-rights legends according to subpart 27.4 [revised: 27.71] of the Defense Federal Acquisition Regulation Supplement.

2.6.4. Do not disseminate technical documents in draft or preliminary form without assigning distribution statements.

2.7. Distribution statements remain in effect until the controlling DoD office changes or removes them. Each controlling DoD office must establish a procedure for reviewing its documents periodically or when they receive a request for the document for possible changes or removal of distribution statements. For unclassified documents, the controlling DoD office must obtain public release determination according to AFPD 35-1 before assigning distribution statement A.

2.8. Controlling DoD offices must notify DTIC and other concerned document-dissemination activities when:

- Program management responsibility is transferred, addresses of designated controlling DoD offices are changed, or controlling DoD offices are redesignated.

- Classification markings, distribution statements, or export control statements are changed or removed.

2.9. For technical publications, place the distribution statement on the front cover, title page, and SF 298, **Report Documentation Page**. If the technical document is not intended for publication and does not have a cover or title page, stamp, print, or write the distribution statement on the front page of the document.

2.10. When possible, put the portions of the document that contain information requiring distribution limitation in an appendix or separate volume to permit broader distribution of the basic document. Write the abstract on the SF 298 so that the information in the abstract will not have a limited distribution (i.e. that it is approved for public release).

2.11. You must include distribution statements and export-control notices on newly created documents.

2.11.1. You do not need to apply markings to technical documents that were created before the implementation of this instruction until someone asks for them. Mark and control them properly before disseminating them.

2.11.2. When older documents contain superseded distribution statements, convert the statements as follows:

2.11.2.1. Assign distribution statements C, B, E, and F to technical documents bearing distribution statements 2, 3, 4, and 5 of superseded DoD Directive 5200.20, *Distribution Statements (Other than Security) on Technical Documents*, 29 March 1965, respectively.

2.11.2.2. Do not reevaluate technical documents with distribution statements A and B of cancelled DoD Directive 5200.20, *Distribution Statements on Technical Documents*, 24 September 1970 or documents with distribution statements A-F contained in Secretary of Defense Memorandum "Control of Unclassified Technology with Military Applications," 18 October 1983.

DISTRIBUTION STATEMENTS AND THEIR CORRESPONDING REASONS FOR USE

DISTRIBUTION A. Approved for public release; distribution unlimited.
DISTRIBUTION B. Distribution authorized to US Government agencies only (reason) (date of determination). Other requests for this document shall be referred to (controlling DoD office).
DISTRIBUTION C. Distribution authorized to US Government agencies and their contractors (reason) (date of determination). Other requests for this document shall be referred to (controlling DoD office).
DISTRIBUTION D. Distribution authorized to DoD and US DoD contractors only (reason) (date of determination). Other requests for this document shall be referred to (controlling DoD office).
DISTRIBUTION E. Distribution authorized to DoD components only (reason) (date of determination). Other requests for this document shall be referred to (controlling DoD office).
DISTRIBUTION F. Further dissemination only as directed by (controlling office) (date of determination) or DoD higher authority.
DISTRIBUTION X. Distribution authorized to US Government agencies and private individuals or enterprises eligible to obtain export-controlled technical data in accordance with DoDD 5230.25 (date of determination). Controlling DoD office is (insert).

"REASON"	STATEMENT					
	B	C	D	E	F	X
ADMINISTRATIVE OR OPERATIONAL USE. To protect technical or operational data or information from automatic dissemination under the international exchange program or by other means. This protection covers publications required solely for official use or strictly for administrative or operational purposes. This statement may be applied to manuals, pamphlets, technical orders, technical reports, and other publications containing valuable technical or operational data.	X	X	X	X		
CONTRACTOR PERFORMANCE EVALUATION. To protect information in management reviews, records of contractor performance evaluation, or other advisory documents evaluating programs of contractors.	X			X		
CRITICAL TECHNOLOGY. To protect information and technical data that advance current technology or describe new technology in an area of significant or potentially significant military application or that relate to a specific military deficiency of a potential adversary. Information of this type may be classified. When unclassified, technology is export controlled.	X	X	X	X		
DIRECT MILITARY SUPPORT. The document contains export-controlled technical data of such military significance that release for purposes other than direct support may jeopardize an important technological or operational US military advantage. Designation of such data is made by competent authority in accordance with DoDD 5230.25.				X		
FOREIGN GOVERNMENT INFORMATION. To protect and limit distribution in accordance with the desires of the foreign government that furnished the technical information. Information of this type normally is classified at CONFIDENTIAL or higher in accordance with DoD 5200.1-R	X	X	X	X		
PREMATURE DISSEMINATION. To protect patentable information on systems or processes in the developmental or concept stage from premature dissemination.	X			X		
PROPRIETARY INFORMATION. To protect information not owned by the US Government and protected by a contractor's "limited rights" statement, or received with the understanding that it not be routinely transmitted outside the US Government.	X			X		
SOFTWARE DOCUMENTATION. Releasable only in accordance with DoDI 7930.2.	X	X	X	X		
TEST AND EVALUATION. To protect results of test and evaluation of commercial products or military hardware when such disclosure may cause unfair advantage or disadvantage to the manufacturer of the product.	X			X		
SPECIFIC AUTHORITY. To protect information not specifically included in the above reasons and discussions but which requires protection in accordance with valid documented authority such as Executive Orders, classification guidelines, DoD or DoD-component regulatory documents. When filling in the reason, cite "specific authority (identification of valid documented authority)."	X	X	X	X	X	

SECTION 7

Unlimited, Statement A *Sample Notice Page*

NOTICE

USING GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA INCLUDED IN THIS DOCUMENT FOR ANY PURPOSE OTHER THAN GOVERNMENT PROCUREMENT DOES NOT IN ANY WAY OBLIGATE THE US GOVERNMENT. THE FACT THAT THE GOVERNMENT FORMULATED OR SUPPLIED THE DRAWINGS, SPECIFICATIONS, OR OTHER DATA DOES NOT LICENSE THE HOLDER OR ANY OTHER PERSON OR CORPORATION; OR CONVEY ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY RELATE TO THEM.

THIS REPORT IS RELEASABLE TO THE NATIONAL TECHNICAL INFORMATION SERVICE (NTIS). AT NTIS, IT WILL BE AVAILABLE TO THE GENERAL PUBLIC, INCLUDING FOREIGN NATIONS.

THIS TECHNICAL REPORT HAS BEEN REVIEWED AND IS APPROVED FOR PUBLICATION.

Sign
[monitor signature block]

Sign
[supervisor signature block]

Sign
[3-ltr chief signature block]

Do not return copies of this report unless contractual obligations or notice on a specific document require its return.

Small Business Innovation Research Program (SBIR)
Sample Notice Page (2 Year Rights – 1992 contracts and earlier)

NOTICE

USING GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA INCLUDED IN THIS DOCUMENT FOR ANY PURPOSE OTHER THAN GOVERNMENT PROCUREMENT DOES NOT IN ANY WAY OBLIGATE THE US GOVERNMENT. THE FACT THAT THE GOVERNMENT FORMULATED OR SUPPLIED THE DRAWINGS, SPECIFICATIONS, OR OTHER DATA DOES NOT LICENSE THE HOLDER OR ANY OTHER PERSON OR CORPORATION; OR CONVEY ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY RELATE TO THEM.

**GOVERNMENT PURPOSE LICENSE RIGHTS LEGEND
(SBIR PROGRAM)**

Contract Number:
Contractor:

For a period of two (2) years after the delivery and acceptance of the last deliverable item under the above contract, all technical data contained in this report marked as Government Purpose License Rights data shall be subject to the restrictions contained in the definition of "Limited Rights in DFARS clause 252.227-7013 (Oct. 1988). After the two-year period, the data shall be subject to the restrictions contained in the definition of "Government Purpose License Rights" in DFARS clause 252.227-7013 (Oct. 1988). The Government assumes no liability for unauthorized use or disclosure by others. This legend, together with the indications of the portions of the data which are subject to such limitations, shall be included on any reproduction hereof which contains any portions subject to such limitations and shall be honored only as long as the data continues to meet the definition on Government purpose license rights.

This technical report has been reviewed and is accepted under the provisions of the Small Business Innovation Research Program.

Sign
[monitor signature block]

Sign
[supervisor signature block]

Sign
[3-ltr chief signature block]

This report is published in the interest of scientific and technical information exchange and does not constitute approval or disapproval of its ideas or findings.

Do not return copies of this report unless contractual obligations or notice on a specific document requires its return.

Small Business Innovation Research Program (SBIR)
Sample Notice Page (4 Year Rights – contracts issued 1993-1995)

NOTICE

USING GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA INCLUDED IN THIS DOCUMENT FOR ANY PURPOSE OTHER THAN GOVERNMENT PROCUREMENT DOES NOT IN ANY WAY OBLIGATE THE US GOVERNMENT. THE FACT THAT THE GOVERNMENT FORMULATED OR SUPPLIED THE DRAWINGS, SPECIFICATIONS, OR OTHER DATA DOES NOT LICENSE THE HOLDER OR ANY OTHER PERSON OR CORPORATION; OR CONVEY ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY RELATE TO THEM.

**GOVERNMENT PURPOSE LICENSE RIGHTS LEGEND
(SBIR PROGRAM)**

Contract Number:

Contractor:

For a period of four (4) years after the delivery and acceptance of the last deliverable item under the above contract, all technical data contained in this report marked as Government Purpose License Rights data shall be subject to the restrictions contained in the definition of "Limited Rights" in DFARS clause at 252.227-7013 (Oct. 1988). After the four-year period, the data shall be subject to the restrictions contained in the definition of "Government Purpose License Rights" in DFARS clause 252.227-7013 (Oct. 1988). The Government assumes no liability for unauthorized use or disclosure by others. This legend, together with the indications of the portions of the data which are subject to such limitations, shall be included on any reproduction hereof which contains any portions subject to such limitations and shall be honored only as long as the data continues to meet the definition of Government purpose license rights.

This technical report has been reviewed and is accepted under the provisions of the Small Business Innovation Research Program.

Sign

[monitor signature block]

Sign

[supervisor signature block]

Sign

[3-ltr chief signature block]

This report is published in the interest of scientific and technical information exchange and does not constitute approval or disapproval of its ideas or findings.

Do not return copies of this report unless contractual obligations or notice on a specific document requires its return.

Small Business Innovation Research Program (SBIR)
Sample Notice Page (5 Year Rights – contracts issued 1996-present)

NOTICE

USING GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA INCLUDED IN THIS DOCUMENT FOR ANY PURPOSE OTHER THAN GOVERNMENT PROCUREMENT DOES NOT IN ANY WAY OBLIGATE THE US GOVERNMENT. THE FACT THAT THE GOVERNMENT FORMULATED OR SUPPLIED THE DRAWINGS, SPECIFICATIONS, OR OTHER DATA DOES NOT LICENSE THE HOLDER OR ANY OTHER PERSON OR CORPORATION; OR CONVEY ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY RELATE TO THEM.

SBIR DATA RIGHTS LEGEND

Contract Number:

Contractor:

For a period of five (5) years after completion of the project from which the data was generated, the Government's rights to use, modify, reproduce, release, perform, display, or disclose any technical data or computer software contained in this report are restricted as provided in paragraph (b)(4) of the Rights in Noncommercial Technical Data and Computer Software Small Business Innovative Research (SBIR) Program clause contained in the above-identified contract [DFARS 252.227-7018 (Jun. 1995)]. No restrictions apply after expiration of that period. Any reproduction of technical data, computer software, or portions thereof marked as SBIR data must also reproduce those markings and this legend.

This technical report has been reviewed and is accepted under the provisions of the Small Business Innovation Research Program.

Sign
[monitor signature block]

Sign
[supervisor signature block]

Sign
[3-ltr chief signature block]

This report is published in the interest of scientific and technical information exchange and does not constitute approval or disapproval of its ideas or findings.

Do not return copies of this report unless contractual obligations or notice on a specific document requires its return.

Sample of Limited With Proprietary Information
[NOT FOR SBIR USE] Sample Notice Page

NOTICE

USING GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA INCLUDED IN THIS DOCUMENT FOR ANY PURPOSE OTHER THAN GOVERNMENT PROCUREMENT DOES NOT IN ANY WAY OBLIGATE THE US GOVERNMENT. THE FACT THAT THE GOVERNMENT FORMULATED OR SUPPLIED THE DRAWINGS, SPECIFICATIONS, OR OTHER DATA DOES NOT LICENSE THE HOLDER OR ANY OTHER PERSON OR CORPORATION; OR CONVEY ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY RELATE TO THEM.

LIMITED RIGHTS LEGEND

Contract Number:

Contractor:

Location of Limited Rights Data [Pages]:

Those portions of the technical data contained in this report marked as limited rights data shall not, without the written permission of the above contractor, be (a) released or disclosed outside the government, (b) used by the Government for manufacture or, in the case of computer software documentation, for preparing the same or similar computer software, or (c) used by a party other than the Government, except that the Government may release or disclose technical data to persons outside the Government, or permit the use of technical data by such persons, if (i) such release, disclosure, or use is necessary for emergency repair or overhaul or (ii) is a release or disclosure of technical data (other than detailed manufacturing or process data) to, or use of such data by, a foreign government that is in the interest of the Government and is required for evaluational or informational purposes, provided in either case that such release, disclosure or use is made subject to a prohibition that the person to whom the data is released or disclosed may not further use, release or disclose such data, and the contractor or subcontractor asserting the restriction is notified of such release, disclosure or use. This legend, together with the indications of the portions of this data which are subject to such limitations, shall be included on any reproduction hereof which includes any part of the portions subject to such limitations.

THIS TECHNICAL REPORT HAS BEEN REVIEWED AND IS APPROVED FOR PUBLICATION.

Sign
[monitor signature block]

Sign
[supervisor signature block]

Sign
[3-ltr chief signature block]

Do not return copies of this report unless contractual obligations or notice on a specific document requires its return.

Limited [Without Proprietary Information]
Sample Notice Page

NOTICE

USING GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA INCLUDED IN THIS DOCUMENT FOR ANY PURPOSE OTHER THAN GOVERNMENT PROCUREMENT DOES NOT IN ANY WAY OBLIGATE THE US GOVERNMENT. THE FACT THAT THE GOVERNMENT FORMULATED OR SUPPLIED THE DRAWINGS, SPECIFICATIONS, OR OTHER DATA DOES NOT LICENSE THE HOLDER OR ANY OTHER PERSON OR CORPORATION; OR CONVEY ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY RELATE TO THEM.

THIS TECHNICAL REPORT HAS BEEN REVIEWED AND IS APPROVED FOR PUBLICATION.

Sign
[monitor signature block]

Sign
[supervisor signature block]

Sign
[3-ltr chief signature block]

Do not return copies of this report unless contractual obligations or notice on a specific document requires its return.

SECTION 8

PRINTING AND CAMERA READY COPY

Printing – Det 1 AFRL/WST will fund the printing of up to 50 copies of each report submitted and the mandatory distribution copies (DTIC, Det 1 AFRL/WST, and AUL/LSAD). Because of the potentially high costs involved, reports requiring more than 50 copies or extensive color reproduction will be handled on a case-by-case basis. Call DSN 785-5197 or (937) 255-5197 for additional information.

Camera ready technical reports and memos should be unbound and suitable for offset reproduction (i.e., high quality, legible with clear lettering and sharp line drawings, graphs/illustrations). Photographs should be glossy finished. **NOTE: Faintly printed or light contrast graphics or photographs will not reproduce well, if at all.**

All pages, except the cover, notice page, and back of the Report Documentation Page should be numbered. The page count in block 15 of the SF 298 needs to match the total number of pages in the camera ready report. **Missing pages will delay the final printing.**

Include the following with each camera ready:

a. **Return of Edited Draft Letter** [provided by Det 1 AFRL/WST with any edited report --for non-edited camera ready copies, request copy of letter from Det 1 AFRL/WST]. Previously Edited - camera ready reports should include all the changes and corrections of the edited technical report draft and follow the Contract Data Requirements List (DD Form 1423-1) specifications. Indicate the number of printed copies required. Review the letter's checklist for:

- (1) If public release and not 6.1 funded, approval from ASC/PA [date and public release number]
- (2) Review/approval by ASC/SYSR for all foreign address mailings
- (3) JON monitor's signature
- (4) Certification of contractor imposed limited rights or right to view export controlled information.

b. **Signed Notice Page.** Three signatures are required: monitor, supervisor, and 3-ltr Chief. Technical reports cannot be sent to printing without this signed document.

c. **Camera ready cover.** Should contain the technical report number, author, title, distribution/availability statements (identical to those listed on the WL Form 79, REQUEST FOR EDITING AND PUBLISHING SUPPORT and SF 298), export control warning (if applicable), destruction notice, and the complete issuing directorate address.

d. **Report Documentation Page, SF 298.** Number this page i. Do not number the back of the SF 298. Begin the Table of Contents page with iii. The information provided on the SF 298 should match that given on the REQUEST FOR EDITING AND SUPPORT worksheet. In block 20, LIMITATION OF ABSTRACT, mark SAR (Same As Report).

e. **Self-adhesive, mailing labels.** Type on the same label your organization's return address and the report destination (do not use labels that require water or glue) . Indicate the number of copies for each address. Excess printed copies will automatically go to the originating office. **Labels for the following mandatory distribution addresses are required:**

DEFENSE TECHNICAL INFORMATION CENTER [2 copies]
DTIC-OMI
8725 JOHN J KINGMAN ROAD SUITE 0944
FT BELVOIR VA 22060-6218

Det 1 AFRL/WST [1 copy--2 copies if Statement A]
BLDG 570 RM S120E
2690 C STREET
WRIGHT-PATTERSON AFB OH 45433-7411

AUL/LSAD, BLDG 1405 [1 copy]
600 CHENNAULT CIRCLE
MAXWELL AFB AL 36112-6424

5. **Classified camera ready technical reports require special handling.**

a. The address in block 2 of the DOCUMENT RECEIPT AND DESTRUCTION CERTIFICATE, **AF Form 310**, should read:

88th CG/SCCIAPD (VAULT), Bldg 281
4165 COMMUNICATIONS BLVD, Door 11
WRIGHT-PATTERSON AFB OH 45433-5603

When filling out AF 310s for classified camera readies, blocks 3,4 and 6 should be left blank. The Distribution Office (PDO) will fill in this information when they make distribution. It is very important to keep each AF 310 in exactly the same order as the distribution list and the mailing labels.

b. It is recommended that laser-printed labels be used. The WPAFB mail room requires one return address label and one addressee label for each on-base addressee. If being sent off base, two sets of mailing labels are required because of security double wrapping requirements. The outer and inner label for each address should be directly across from each other. Please note: The return address on label should be your organization's address and not the 88th CG/SCCIAPD (VAULT) address. Names of individuals can appear on the inside labels of Air Force addressees only. Do not put individual names on Army, Navy or contractor mailing labels. Individual names do, however, need to be put on all AF 310s regardless of address location.

c. Send copies of classified reports to the mandatory addresses listed above.

d. Include a distribution list as the last page of the classified report, annotate in the Table of Contents and page number sequentially.

e. Indicate the number of printed copies required, check the appropriate boxes on the **Return of Edited Draft** letter, return the letter with the finalized classified camera ready, and follow standard security and distribution practices.

***** SAMPLE *** TRANSMITTAL/INDORSEMENT LETTER *** SAMPLE *****
DISTRIBUTION STATEMENT A - EXCEPT 6.1 FUNDED

MEMORANDUM FOR AFRL/VAAC
Attn: Monitor

04/10/98

FROM: Det 1 AFRL/WST
Bldg 570 Rm S120E
2690 C Street
Wright-Patterson AFB OH 45433-7411

SUBJECT: Return of Edited Draft

1. Your unclassified/unlimited report, AFRL-VA-WP-TR-1998-XXXX, is attached. It must be returned to the contractor with editorial and technical comments for review and correction. The contractor must then prepare a camera ready copy of the report within 30 days in accordance with the CDRL. The camera ready copy should be returned to Det 1 AFRL/WST.
2. Thank you for your cooperation. If you have any questions, please do not hesitate to call (55197).

STINFO & Technical Editing
Technical Information Branch

1st Ind,

TO: Det 1 AFRL/WST

1. The attached approved camera ready report is forwarded for printing. Please have ____ copies printed.
2. The following requirements apply:
 - ☐ A signed notice page is included.
 - ☐ A set of mailing labels is attached.
 - ☐ ASC/PA has approved public release.
Release number: ____ - _____, dated: _____.
 - ☐ The SF 298 has been "sanitized" and can be released to DTIC.
 - ☐ I certify that any mailings to foreign addresses have been reviewed and approved by ASC/SYSR, Foreign Disclosure.
 - ☐ I certify that if this report contains contractor imposed limited rights it has been approved by the contracting officer.
 - ☐ I certify that if this report contains export controlled information, all nongovernment addresses on mailing labels are registered with the Defense Logistics Services Center (DLSC). Their phone number is 1-800-352-2572

1 Atch
Camera Ready Report

(JON Monitor's Signature)

*****SAMPLE *** TRANSMITTAL/INDORSEMENT LETTER *** SAMPLE *****
CLASSIFIED DOCUMENT

MEMORANDUM FOR AFRL/SNRT
Attn: Monitor

04/10/98

FROM: Det 1 AFRL/WST
Bldg 570 Rm S120E
2690 C Street
Wright-Patterson AFB OH 45433-7411

SUBJECT: Return of Edited Draft

1. Your classified/limited report, AFRL-SN-WP-TR-1998-XXXX, is attached. It must be returned to the contractor with editorial and technical comments for review and correction. The contractor must then prepare a camera ready copy of the report within 30 days in accordance with the CDRL. The camera ready copy should be returned to Det 1 AFRL/WST.
2. Thank you for your cooperation. If you have any questions, please do not hesitate to call (55197).

STINFO & Technical Editing
Technical Information Branch

1st Ind,

TO: Det 1 AFRL/WST

1. The attached approved camera ready report is forwarded for printing. Please have ____ copies printed.
2. The following requirements apply:
 - ☐ A signed notice page is included.
 - ☐ A distribution list is part of the report.
 - ☐ A double set of mailing labels is attached.
 - ☐ All paragraphs marked IAW AFR 205-1
 - ☐ Distribution will be made to ASC/NAIC/POA and Det 1 AFRL/WST.
 - ☐ AF form 310
 - ☐ The SF 298 has been "sanitized" and can be released to DTIC.
 - ☐ I certify that any mailings to foreign addresses have been reviewed and approved by ASC/SYSR, Foreign Disclosure.
 - ☐ I certify that if this report contains contractor imposed limited rights it has been approved by the contracting officer.
 - ☐ I certify that if this report contains export controlled information, all nongovernment addresses on mailing labels are registered with the Defense Logistics Services Center (DLSC).
 - ☐ I certify that all addressees on the distribution list have the required individual or facility clearances and storage facilities necessary for receipt of this document.

1 Atch
Camera Ready Report

(JON Monitor's Signature)

SECTION 9

JOURNAL ARTICLES

The Air Force encourages its scientific and technical personnel to publish research results in recognized journals. The publication of information generated by AFRL-related R&D programs in national and international journals enhances the reputation of the Laboratory, and provides a far-reaching means of sharing AFRL technological advancements.

The majority of articles must be cleared prior to publication with the ASC Public Affairs (PA) Office (see sample of request letter for PA approval on page 12 of this guide).

- Contracted fundamental research, which is sponsored by 6.1 funds, does not require PA clearance.
- 6.2 funded, university and college projects, only require classification review.

AFI 61-202, *United States Air Force Technical Information Program*, requires that "official articles" be submitted to the Defense Technical Information Center (DTIC). "Official articles" being defined as articles created using Air Force dollars or Air Force time. Finding DoD-generated articles that appear in national or international sources can be difficult, time-consuming, and expensive. Placing copies of all DoD-generated articles in DTIC's comprehensive collection of scientific and technical information ensures these articles are readily available to DoD, other government agencies, contractors, and, where applicable, the general public.

Two copies of each article (as submitted for publication) along with a WL Form 79 *Request for Editing and Publishing Support*, should be sent to Det 1 AFRL/WST (STINFO). If submission copies of articles are not available, please furnish copies as published. One copy will be retained in the AFRL technical reports vault and one copy will be sent to DTIC.

***** *sample journal article* *****

Transition on Turbine Blades and Cascades at Low Reynolds Numbers

Richard B. Rivir*
Wright Lab Directorate
US Air Force Air Force Research Laboratory
Wright-Patterson AFB, Ohio

Abstract

The words that follow are merely randomly selected excerpts from an article, as this is an example only. Unpredicted losses in the low pressure turbine during operation at high altitudes has stimulated current interest in transition, and separation at low Reynolds numbers. In the turbine, free stream turbulence levels or unsteadiness resulting from vane wakes, passage vortices, and end wall horseshoe vortices exceeds the unsteadiness levels associated with a fully turbulent boundary layer.

In our work on low pressure, low Reynolds number turbine flows we have a few new measurements of transition, transition length and turbulence scales to add

Introduction

The commonly held physical picture of the transition process is illustrated schematically in Figure 1. Two D Tollmien Schlichting waves are amplified, breaking down into Emmons spots which propagate as a wedge with a following quiet wedge region until the boundary layer has become fully turbulent. Turbine transitions

***Associate Fellow**

This paper is declared a work of the U.S. Government and as such is not subject to copyright protection in the United States

SECTION 10

DTIC ACCESSION NOTICE DTIC FORM 50

The AFRL/ASC STINFO is responsible for ensuring that AFRL/ASC technical publications are sent to the Defense Technical Information Center (DTIC) for inclusion in their comprehensive collection of DoD official technical information.

DTIC acknowledges the receipt of reports and other information by sending an annotated DTIC Form 50 to the AFRL/ASC STINFO office. The DTIC Form 50 indicates the unique accession number (i.e., AD#.....) DTIC has assigned to the specific technical report or memo. This DTIC Form 50 is forwarded, in turn, to the submitting organization by STINFO after the accession number has been entered into the STINFO report database. Monitors should indicate the assigned AD# in the case file and the ASTARS record.

**DEFENSE TECHNICAL
INFORMATION CENTER**

8725 John J Kingman
Ft. Belvoir, VA 22060-6218

OFFICIAL BUSINESS
PENALTY FOR PRIVATE USE, \$300

AD NUMBER	DATE	DTIC ACCESSION NOTICE
1. REPORT IDENTIFYING NUMBER		REQUESTOR: 1. Put your mailing on reverse of form. 2. Complete items 1 and 3. Attach form to reports mailed to DTIC. 4. Use unclassified information only. 5. Do not order documents for 6 to 8 weeks.
A. ORIGINATING AGENCY		
B. REPORT TITLE AND/OR NUMBER		
C. MONITOR REPORT NUMBER		
D. PREPARED UNDER CONTRACT NUMBER		
2. DISTRIBUTION STATEMENT		DTIC: 1. Assign AD Number 2. Return to requestor

DTIC Form 50

PREVIOUS EDITIONS ARE

ELECTRONIC SUBMISSION OF TECHNICAL REPORTS TO DTIC

The Defense Technical Information Center is accepting the electronic delivery of the full text of scientific and technical engineering (STEI) for storage and dissemination.

- Electronic processing is currently being tested
 - DTIC will accept documents in Word, WordPerfect, Postscript, ASCII, or PDF
 - Diskette [put all files in one directory]
 - FTP file transfer recommended for multiple documents [Statement A documents only]
 - Include 'read-me' document on how to assemble files and indicate which version of Word or WordPerfect is used.
 - Wants paper copy to accompany electronic document to verify correct information has been transferred
 - Once it has been verified that these transfers have been successful [without loss of data or formatting], paper copies will not be required
 - Report Documentation Page, SF298, is available in FormFlow and Microsoft Word formats and needs to accompany the file
- Documents will still need to be screened by STINFO
 - Paper copies preferred for Reports Vault and Air University
- Submissions will be entered into DTIC's electronic documents database
 - Full text accessible documents
 - Retrievable via PDF format
- DTIC identifying AD numbers forwarded to STINFO/organizations via e-mail

SECTION 11

AIR FORCE POLICY DIRECTIVE 61-2

PUBLICATIONS WITH RELATED POLICIES AND INSTRUCTIONS

Publication Designation	Title	Former Publication or Date
DoD Directive 3200.12	DoD Scientific and Technical Information (STI) Program (STIP)	February 11, 1998
DoD Directive 5200.12	Conduct of Classified Meetings	July 27, 1992
DoD Directive 5230.24	Distribution Statements on Technical Documents	March 18, 1987
DoD Directive 5230.25	Withholding of Unclassified Technical Data From Public Disclosure	November 6, 1984
DoD Directive 5230.27	Presentation of DoD-Related Scientific and Technical Papers at Meetings	October 6, 1987
DoD Directive 8910.7	Management and Control of Information Requirements	June 11, 1993
DoD Instruction 3200.14	Principles and Operational Parameters of the DoD Scientific and Technical Information Program	May 13, 1997

A2.2. This directive interfaces with the following Air Force policy directives and instructions:

Publication Designation	Title	Former Publication or Date
AFPD 61-1	Management of Air Force Science and Technology	AFR 80-3
AFI 61-201	Responsibilities of the Local STINFO Officer	AFR 83-1
AFI 61-202	AF Technical Publications Program	AFR 83-2
AFI 61-203	R & T Work-Unit Information System	AFR 80-12

AFI 61-204	Controlling the Distribution of Classified and Unclassified STINFO	AFRs 80-30, 80-34, and 83-3
AFI 61-205	Sponsoring or Cosponsoring, Conducting, and Presenting DoD-Related Scientific and Technical Papers at Unclassified and Classified Conferences, Symposia, and Other Similar Meetings	AFR 80-43
AFI 61-207	Air Force Information for Industry Offices	AFR 80-11
AFI 61-208	Air Force Potential Contractor Program	No Former Publication
AFI 61-209	Advance Planning Briefings for Industry	No Former Publication
AFR 80-39 (Joint Departmental Publication)	Certification and Registration for Access to Scientific and Technical Information	May 5, 1977

Additional related publications:

DTIC/TR-97-7 AD-A328942	DoD STINFO Manager Training Course - STINFO Documentation
DTIC/TR-93-10 AD-A260200	DoD STINFO Manager Training Course - Training Manual